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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,426	12/22/2000	Hiroshi Matsuda	250-827	8033

7590 03/20/2003

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EXAMINER
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SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 03/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/742,426

Applicant(s)

MATSUDA, HIROSHI

Examiner

Callie E. Shosho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 23 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 6-8, 11-15, 18-22 and 25-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-8, 11-15, 18-22 and 25-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. All outstanding rejections except for those described below are overcome by applicant's amendment filed 12/23/02. The new grounds of rejection as set forth below are necessitated by applicant's amendment and thus, the following action is final.

**Claim Rejections - 35 USC § 112**

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 6-8, 11-15, 18-22, and 25-30 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 6, 18, and 25 have been amended to recite that the ink is "essentially devoid of a non-ionic surfactant". The same phraseology is also found in newly added claim 26. Claim 11 recites that the ink is "substantially devoid of a non-ionic surfactant". It is the examiner's position that both phrases, i.e. "essentially devoid of a non-ionic surfactant" and "substantially devoid of a non-ionic surfactant", fail to satisfy the written description requirement under the cited statute since there does not appear to be a written description requirement of either phrase in the application as originally filed, *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989) and MPEP 2163. Applicant has not pointed to any portion of the specification, and examiner has not found any support for this phraseology in the specification as originally filed.

It is noted that page 1, lines 7-8 of the present specification discloses that the ink of the present invention is "free from an emulsifier which forms a liquid crystal structure between the oil phase and the water phase", page 2, line 13-page 3, line 5 disclose that while the "majority of the emulsifiers form emulsion adsorbed by the interface in monomolecular film, the polyglycerol fatty-ester is adsorbed by the interface in polymolecular film, that is, in the case of the polyglycerol fatty-ester, a plurality of polyglycerol fatty-ester films are formed around a water phase of a W/O emulsion ink (or an oil phase in the case of an O/W emulsion in ink) and a so-called liquid crystal structure is formed", and page 6, lines 20-24 disclose that "in the case of ink where an emulsifier which forms a liquid crystal structure between the oil phase and the water phase is employed as the conventional emulsion ink, it is difficult for the emulsion to have both good storage stability and rapid penetration into paper". Thus, while there is support in the specification as originally filed that the ink is "free from an emulsifier which forms a liquid crystal structure between the oil phase and the water phase", there is no support for the recitation that the ink is "essentially devoid of non-ionic surfactant" or "substantially devoid of a non-ionic surfactant". From the present specification, there is no disclosure that every non-ionic surfactant forms a liquid crystal structure between the oil phase and the water phase. Rather, page 2 of the present specification discloses that only a specific type of emulsifier or surfactant, namely, polyglycerol fatty-ester forms a liquid crystal structure. Thus, while there appears to be support for the recitation that the ink is free of one specific type of emulsifier or surfactant, namely, polyglycerol fatty-ester, there is no support to recite that the ink is substantially or essentially devoid of all types of non-ionic surfactant.

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Further, while the present specification discloses that the ink is "free" from certain emulsifiers, there is no disclosure that the ink is "essentially devoid" or "substantially devoid" of these emulsifiers.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 6-8, 11-15, 18-22, and 25-30 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6, 18, and 25-26 each recite that the ink is "essentially devoid" of non-ionic surfactant. The term "essentially devoid" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Thus, the scope of the claim is confusing because it is not clear what is meant by this phrase. How much non-ionic surfactant can the ink contain and still be considered "essentially devoid" of non-ionic surfactant – 0.01% 0.1%, 1%, etc.

The questions arise with respect to claim 11 which recites that the ink is "substantially devoid" of non-ionic surfactant. The term "substantially devoid" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Thus, the scope of the claim is confusing because it is not clear what is meant by this phrase. How much

non-ionic surfactant can the ink contain and still be considered "substantially devoid" of non-ionic surfactant – 0.01% 0.1%, 1%, etc.

**Claim Rejections - 35 USC § 102**

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Asada (U.S. 6,165,258).

The rejection is adequately set forth in paragraph 3 of the office action mailed 9/25/02, Paper No. 8, and is incorporated here by reference.

With respect to the newly added limitation that the ink is "essentially devoid" of a non-ionic surfactant, it is noted that Asada discloses the use of 0.5% non-ionic surfactant. Although it is not clear what is meant by the phrase "essentially devoid" (see paragraph 5 above), given the small amount of non-ionic surfactant required by Asada et al., it is clear that the ink of Asada is "essentially devoid" of non-ionic surfactant.

8. Claims 11-15, 18-22, and 25-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Asada (U.S. 6,165,258).

The rejection is adequately set forth in paragraph 4 of the office action mailed 9/25/02, Paper No. 8, and is incorporated here by reference.

With respect to the newly added limitation that the ink is "substantially devoid" of a non-ionic surfactant (claim 11) or "essentially devoid" of a non-ionic surfactant (claims 18, 25, and 26), it is noted that Asada discloses the use of 0.5% non-ionic surfactant. Although it is not clear what is meant by the phrase "essentially devoid" or "substantially devoid" (see paragraph 5 above), given the small amount of non-ionic surfactant required by Asada et al., it is clear that the ink of Asada is either "substantially devoid" or "essentially devoid" of surfactant.

**Claim Rejections - 35 USC § 103**

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asada (U.S. 6,165,258).

The rejection is adequately set forth in paragraph 6 of the office action mailed 9/25/02, Paper No. 8, and is incorporated here by reference.

With respect to the newly added limitation that the ink is "essentially devoid" of a non-ionic surfactant, it is noted that Asada discloses the use of 0.5% non-ionic surfactant. Absent clarification regarding the scope of the phrase "essentially devoid" of a non-ionic surfactant and given the small amount of surfactant disclosed by Asada, it would have been within the skill level of one of ordinary skill in the art to infer, absent evidence to the contrary, that the ink of Asada is "essentially devoid" of a non-ionic surfactant, and thereby arrive at the claimed invention.

11. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 06049401 in view of Asada (U.S. 6,165,258).

The rejection is adequately set forth in paragraph 8 of the office action mailed 9/25/02, Paper No. 8, and is incorporated here by reference.

With respect to the newly added limitation that the ink is "essentially devoid" of a non-ionic surfactant, it is noted from the examples that JKP 0604901 discloses the use of 3.6-5% non-ionic surfactant. Absent clarification regarding the scope of the phrase "essentially devoid" of a non-ionic surfactant and given the small amount of surfactant disclosed by JP 0604901, it would have been within the skill level of one of ordinary skill in the art to infer, absent evidence to the contrary, that the ink of JP 06049401 is "essentially devoid" of a non-ionic surfactant, and thereby arrive at the claimed invention.

12. Claims 13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asada (U.S. 6,165,258).

The rejection is adequately set forth in paragraph 9 of the office action mailed 9/25/02, Paper No. 8, and is incorporated here by reference.

With respect to the newly added limitation that the ink is "essentially devoid" of a non-ionic surfactant, it is noted that Asada discloses the use of 0.5% non-ionic surfactant. Absent clarification regarding the scope of the phrase "essentially devoid" of a non-ionic surfactant and given the small amount of surfactant disclosed by Asada, it would have been within the skill level of one of ordinary skill in the art to infer, absent evidence to the contrary, that the ink of



Asada is "essentially devoid" of a non-ionic surfactant, and thereby arrive at the claimed invention.

### **Response to Arguments**

13. Applicant's arguments regarding Ono et al. (U.S. 4,585,815) have been considered but they are moot in view of the discontinuation of this reference against the present claims.

14. Applicant's arguments have been fully considered but, with the exception of arguments relating to Ono et al., they are not persuasive.

Specifically, applicant argues that Asada and JP 06049401 are no longer relevant references against the present claims given that both references disclose inks which require the use of non-ionic surfactant which is in direct contrast to the present claims which require either than the ink is "substantially devoid" of non-ionic surfactant or "essentially devoid" of non-ionic surfactant.

However, as set forth in paragraph 5 above, the scope of all the present claims is confusing because it is not clear what is meant by "substantially devoid" of non-ionic surfactant or "essentially devoid" of non-ionic surfactant. Thus, absent evidence to the contrary and given the small amounts of surfactant disclosed by either Asada or JP 06049401, it is clear that the inks of either Asada or JP 06049401 do fall within the scope of the present claims.

15. **NOTE:** If applicants were to cancel the recitation of "substantially devoid of non-ionic surfactant and "essentially devoid of non-ionic surfactant" as set forth in the present claims in

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response to the rejection under 35 USC 112 as set forth in paragraphs 3 and 5 above, examiner would reinstate the rejections of record as set forth in the office action mailed 9/25/02, Paper No. 8.

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

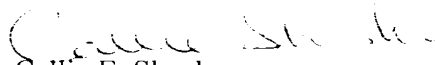
17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
Callie E. Shosho  
Examiner  
Art Unit 1714

CS  
March 18, 2003